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EXAMINER

STEVENS, THOMAS H

ART UNIT	PAPER NUMBER
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2123

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DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/681,333

Applicant(s)

SPRADLIN ET AL.

Examiner

Thomas H. Stevens

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/36/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-26 were examined.

#### *Priority*

2. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged and granted.

#### *Information Disclosure Statement*

3. The listing of references in the specification (pg 1, lines 1-3) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

#### *Claim Interpretation*

4. Office personnel are to give claims their "**broadest reasonable interpretation**" in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim are not read into the claim. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See \*also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow") .... The reason is

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simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed ....

An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process. **The examiner interprets the claims as a network-based 3-D imaging software package with the capability of superimposing 3-D/2-D images (i.e., sub-files/sub-programs) on to other sub-files/sub-programs.**

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Words coupling the term "as needed" and "particular" disclosed the scope of the specification lacks detailed steps or decisions for the user to inject a specific feature for a specific event.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

8. Regarding claims 1,4,5, and 14 the phrase "particular" renders the claims vague and indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

9. Furthermore, regarding claims 1-25, the phrase "as needed" renders the claims vague and indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-4,7-17,20-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Floating Point System Inc<sup>®</sup> ( "Welcome to the LandForm Trial Version from Rapid Imaging Software" (1997)).

Floating Point System teaches a 3-D imaging software package called LandFormGold and LandForm C3, that permits the user to view geographical data in a three-dimensional representation.

Claim 1. A method for building an as-needed computer generated model, comprising the steps of: storing a max-case model file relating to a max-case design model, wherein said max-case design model includes plurality of model sub-components (pg.

1, Introduction); extracting viewer-readable files for each of said plurality of model sub-components (pg. 3, Running the Demo, 3<sup>rd</sup> paragraph); generating a max-case design script including retrieval information for each of said plurality of model sub-components (pg. 1, paragraph 1, last sentence and pg. 6, line 6); receiving a user selection of particular as-needed model sub-components (pg. 4, Changing the View, paragraphs 1-8); generating an as-needed design script including retrieval information for each of the as-needed model sub-components (pg. 1, 2<sup>nd</sup> paragraph); retrieving, in a model viewing application, the viewer-readable files for each of the as-needed model sub-components' building the as-needed model from the retrieved viewer-readable files (pg. 4, Changing the View, paragraphs 1-8); and displaying the as-needed model to the user (pg. 2, bullets 1-12).

Claim 2. The method of claim 1, wherein the step of generating a max-case design script further comprises the step of extracting location information for each of the model sub-components (pg. 1, 2<sup>nd</sup> paragraph).

Claim 3. The method of claim 1, further comprising the step of storing said viewer readable files in at least one computer-readable medium (pg. 2, System Requirements).

Claim 4. The method of claim 1, further comprising the step of storing said user selection of particular as-needed model sub-components in at least one computer-readable medium (pg. 2, System Requirements).

Claim 7. The method of claim 1, further comprising the step of storing said viewer readable files a VRML file format (pg. 2, bullets 6-7).

Claim 8. The method of claim 1, further comprising the step of storing said viewer readable files in a TIFF file format (pg. 2, bullet 9).

Claim 9. The method of claim 1, further comprising the step of storing said max case design script and said as-needed design script in an ASCII file format (pg. 2, Type of Source Files, row 8).

Claim 10. The method of claim 1, further comprising the steps of: extracting spatial orientation information related to the three dimensional orientation of each of the model sub-components and including the spatial orientation information in the max-case design script (pg.1, Introduction, 1<sup>st</sup> paragraph); receiving, from the user, sub-component placement and orientation information for each as-needed model sub—component (pg. 1, Introduction, 1<sup>st</sup> paragraph and pg. 2, bullets 1-12); and including within the as-needed design script, the received sub-component placement and orientation information (pg.2, bullets 1-12).

Claim 11. The method of claim 10, wherein said spatial orientation information includes six degrees of freedom (pg.2, bullets 1-12 and pg. 4, line 2).

Claim 12. The method of claim 10, wherein said spatial orientation information includes coordinates for an angle of rotation about each of the x, y, and z axes (pg.1, Introductions, 1st paragraph; and pg. 4, 1<sup>st</sup> paragraph), relative to a pre-established coordinate axes, and an offset in each of the x, y, and z (pg.1, Introductions, 1st paragraph; and pg. 4, 1<sup>st</sup> paragraph) directions relative to a predetermined model center point (pg. 4, Changing the View, paragraphs 2,3,7,8 and pg. 5, 1<sup>st</sup> paragraph; and pg. 5, Moving Around the Model, 3<sup>rd</sup> paragraph).

Claim 13. A method for building and displaying an as-needed computer generated model, comprising the steps of (pg.1, Introduction, paragraphs 1-5 and pg. 3, System Requirements): receiving a selection of a plurality of model sub-components that, when assembled together, form the as-needed computer generated model (pg. 5, Overlaying GeoTIFF Images on Terrain Data, 1<sup>st</sup> paragraph); executing an as-needed script readable by a model viewing software application and related to the selected plurality of model sub-components(pg. 1, 2<sup>nd</sup> paragraph), wherein the as-needed script includes retrieval information for each of the plurality of model sub-components(pg. 5, Overlaying GeoTIFF Images on Terrain Data, 1<sup>st</sup> paragraph); retrieving, based upon said as-needed script, a plurality of viewer-readable files corresponding to the selected plurality of model sub-components' building the as-needed computer generated model from the plurality of retrieved viewer-readable files in a model viewing software application (pg. 7 figure 1 and paragraph 1); and displaying the as-needed computer



generated model in the model viewing software application (pg.7, figures 1 and 2 and lines 2-3).

Claim 14. A system for building an as-needed computer generated model, comprising: a multi-dimensional-modeling tool for generating and storing a max-case model file relating to a max-case design model, wherein said max-case design model includes plurality of model sub-components (pg.1, Introduction, paragraphs 1-5 and pg. 3, System Requirements); a sub-component extraction utility electronically connected to said multi-dimensional modeling tool for extracting viewer-readable files for each of said plurality of model sub-components (pg. 1, Introduction, paragraph 1,2); a viewer utility electronically connected to said sub-component extraction utility for generating a max-case design script that includes at least retrieval information for each of said plurality of model sub-components (pg. 7, figures 1 and 2 and line 2); a product configurator application electronically connected to said viewer utility for receiving a user selection of particular as-needed model subcomponents (pg. 1, Introduction, 1<sup>st</sup> paragraph and pg. 2, bullets 1-12); and a viewer application electronically connected to said product configurator application and said sub--component extraction utility for generating an as needed design script including retrieval information for each of the as needed model sub-components, retrieving, the viewer-readable files for each of the as-needed model sub-components, building the as-needed model from the retrieved viewer-readable files; and displaying the as needed model to the user (pg. 1, Introduction, paragraph 1; pg.4, paragraphs 1-8 and pg. 5, 1<sup>st</sup> paragraph).

Claim 15. The system of claim 14, wherein said viewer utility extracts location information for each of the model sub-components (pg. 7, figures 1 (i.e., pitch, roll, lat, long, mission time, etc.) and line 2).

Claim 16. The system of claim 14,(pg.1, Introduction, paragraphs 1-5 and pg. 3, System Requirements), wherein said sub-component extraction utility stores said viewer-readable files in at least one computer-readable medium.

Claim 17. The system of claim 14,(pg.1, Introduction, paragraphs 1-5 and pg. 3, System Requirements), wherein said product configurator application stores said user selection of particular as-needed model sub-components in at least one computer-readable medium.

Claim 20. The system of claim 14, wherein said viewer-readable files are stored in a VRML file format (pg. 2, Type of Source Files, row 8).

Claim 21. The system of claim 14, wherein said viewer-readable files are stored in a TIFF file format (pg. 2, bullet 9).

Claim 22. The system of claim 14, wherein said max-case design script and said as needed design script are stored in an ASCII file format (pg. 2, Type of Source Files, row 8).

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Claim 23. The system of claim 14, wherein: said sub-component extraction utility further extracts spatial orientation information related to the three dimensional orientation of each of the model sub-components (pg. 1, Introduction, 1<sup>st</sup> paragraph; and pg. 4, 1<sup>st</sup> paragraph; and pg.4, Changing the View, paragraphs 1-7); said viewer utility further includes the spatial orientation information in the max-case design script (pg. 4, 1<sup>st</sup> paragraph); said product configurator application further receives, from the user, sub-component placement and orientation information for each as-needed model sub-component (pg. 5, Overlaying GeoTIFF Images on Terrian Data, 1<sup>st</sup> paragraph); and said viewer application further includes, within the as-needed design script, the received sub-component placement and orientation information (pg. 2, bullets 1-12).

Claim 24. The system of claim 23, wherein said spatial orientation information includes six degrees of freedom (pg. 2, bullets 1-12 and pg. 4, lines 2).

Claim 25. The system of claim 23, wherein said spatial orientation information includes coordinates for an angle of rotation about each of the x, y, and z axes (pg.1, Introductions, 1st paragraph; and pg. 4, 1<sup>st</sup> paragraph), relative to a pre-established coordinate axes, and an offset in each of the x, y, and z (pg.1, Introductions, 1st paragraph; and pg. 4, 1<sup>st</sup> paragraph) directions relative to a predetermined model center point (pg. 4, Changing the View, paragraphs 2,3,7,8 and pg. 5, 1<sup>st</sup> paragraph; and pg. 5, 3<sup>rd</sup> paragraph).

Claim 26. A system for building and displaying an as-needed computer generated model, comprising: a product configurator application for receiving a selection of a plurality of model sub-components that (pg. 1, Introduction, paragraphs 1-5 and pg. 3, System Requirements), when assembled together, form the as-needed computer generated model; a viewer application for executing an as-needed script related to the selected plurality of model sub-components, wherein the as--needed script includes retrieval information for each of the plurality of model sub-components (pg. 4, 1<sup>st</sup> paragraph and pg. 7, figure 1); said viewer application further retrieving, based upon said as-needed script, a plurality of viewer-readable files corresponding to the selected plurality of model sub-components (pg. 1, Introduction, paragraphs 1-3 and pg. 7 figure 1); said viewer application further building the as-needed computer generated model from the plurality of retrieved viewer-readable files in a model viewing software application (pg. 5, Moving Around the Model, paragraphs 1-7); and said viewer application further displaying the as needed computer generated model in the model viewing software application (pg. 1, Introduction, paragraphs 1-3 and pg. 7 figure 1).

***Claim Rejections - 35 USC § 103***

12. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5, 6, 18 and 19 are rejected under 35 U.S.C. 103 (a) as unpatentable by Floating Point System Inc<sup>®</sup>. ("Welcome to the Landform Trial Version from Rapid Imaging Software (1997)), in view of Lombardi (U.S. Patent 5,889,951 (1999))

Floating Point System teaches a 3-D imaging software package called LandFormGold and LandForm C3, which allow the user to view geographical data in a three-dimensional representation; but doesn't have Internet capabilities.

Lombardi teaches users the ability to lease portions of the virtual environment, to create and modify the appearance and functionality of virtual sites on least portions to assign Internet site data and services to virtual sites (abstract: last sentence).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to use Lombardi to modify Floating Point Systems Inc<sup>®</sup> since it would have been advantageous for a firm to implement a secure Internet/Intranet network for project assigned real-time analysis and design.

Claim 5. The method of claim 1, wherein at least the step of: extracting viewer readable files for each of said plurality of model sub-components (Floater: Introduction, paragraph); receiving a user selection of particular as-needed model sub-components (Floater: 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs); and displaying the as-needed model to the user are completed at remote locations to each other (Floater: pg.2, bullets 1-12 and Lombardi: abstract, last sentence; column 1, lines 63-64 column 25, lines 5-6 and 59).

Claim 6. The method of claim 5 (Floater: pg.2, bullets 1-12 and Lombardi: abstract, last sentence; column 1, lines 63-64 column 25, lines 5-6 and 59), wherein the remote locations are connected by a computer network.

Claim 18. The system of claim 14 (Floater: pg.1, Introduction, paragraphs 1-5 and pg. 3, System Requirements; pg. 7, figures 1 and 2 and line 2), wherein at least said multi-dimensional modeling tool, said sub-component extraction utility, said product configurator application, and said viewer application are located at remote locations to each other (Lombardi: abstract, last sentence; column 1, lines 63-64 column 25, lines 5-6 and 59).

Claim 19. The system of claim 18, wherein the remote locations are connected by a computer network (Floater: pg.1, Introduction, paragraphs 1-5 and pg. 3, System Requirements; pg. 7, figures 1 and 2 and line 2 and Lombardi: abstract, last sentence; column 1, lines 63-64 column 25, lines 5-6 and 59).

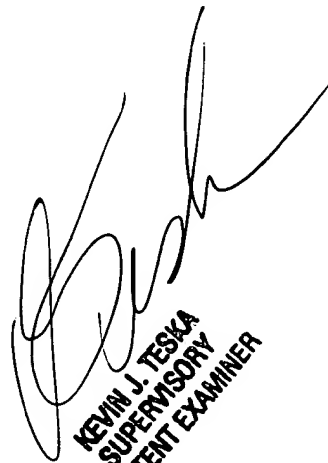
***Correspondence Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Stevens whose telephone number is (703) 305-0365, Monday-Friday (8:30 am- 5:30 pm) or contact Supervisor Mr. Kevin Teska at (703) 305-9704. The fax number for the group is 703-872-9306.

Any inquires of general nature or relating to the status of this application should be directed to the Group receptionist whose phone number is (703) 305-3900.

June 8, 2004

THS



KEVIN J. TESKA  
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